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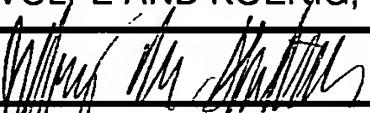
Total Number of Pages in This Submission

Application Number	10/053,969
Filing Date	January 22, 2002
First Named Inventor	Stephen E. Terry
Art Unit	2662
Examiner Name	Donald L. Mills
Attorney Docket Number	I-2-0135.2US

## ENCLOSURES (Check all that apply)

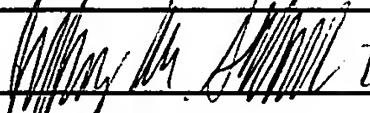
<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
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<input type="checkbox"/> Reply to Missing Parts/ Incomplete Application	<input type="checkbox"/> Landscape Table on CD	
<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Remarks	

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	VOLPE AND KOENIG, P.C.		
Signature			
Printed name	Jeffrey M. Glabicki		
Date	February 3, 2005	Reg. No.	42,584

## CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Appeal Brief - Patents, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature			
Typed or printed name	Jeffrey M. Glabicki	Date	February 3, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Effective on 12/08/2004.

In pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

# FEE TRANSMITTAL

## For FY 2005

Applicant claims small entity status. See 37 CFR 1.27

**TOTAL AMOUNT OF PAYMENT** (\$500.00)

Complete if Known	
Application Number	10/053,969
Filing Date	January 22, 2002
First Named Inventor	Stephen E. Terry
Examiner Name	Donald L. Mills
Art Unit	2662
Attorney Docket No.	I-2-0135.2US

### METHOD OF PAYMENT (check all that apply)

Check  Credit Card  Money Order  None  Other (please identify): \_\_\_\_\_  
 Deposit Account Deposit Account Number: 09-0435 Deposit Account Name: InterDigital Communications Corporation

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

Charge fee(s) indicated below  Charge fee(s) indicated below, except for the filing fee  
 Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17  Credit any overpayments

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### FEE CALCULATION

#### 1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity	Fee (\$)	Small Entity	Fee (\$)	Small Entity	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

#### 2. EXCESS CLAIM FEES

##### Fee Description

Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent 50 25  
 Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent 200 100  
 Multiple dependent claims 360 180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims	
				Fee (\$)	Fee Paid (\$)
- 20 or HP =	x	= 0.00			
HP = highest number of total claims paid for, if greater than 20				0.00	

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
- 3 or HP =	x	= 0.00	

HP = highest number of independent claims paid for, if greater than 3

#### 3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
- 100 =	/ 50 =	(round up to a whole number) x	= 0.00	

#### 4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other: Filing a Brief in support of an Appeal

**Fees Paid (\$)**

500.00

### SUBMITTED BY

Signature		Registration No. 42,584 (Attorney/Agent)	Telephone 215-568-6400
Name (Print/Type)	Jeffrey M. Glabicki		Date February 3, 2005

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the **PATENT APPLICATION** of:

Stephen E. Terry

**Application No.:** 10/053,969

**Confirmation No.:** 4018

**Filed:** January 22, 2002

**For:** FLOW CONTROL OF A SPREAD  
SPECTRUM MULTIUSER CHANNEL

**Group:** 2662

**Examiner:** Donald L. Mills

Our File: I-2-0135.2US

Date: February 3, 2005

Mail Stop Appeal Brief -Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPEAL BRIEF TO THE BOARD OF PATENT APPEALS  
AND INTERFERENCES PURSUANT TO C.F.R. §41.37(c)**

Sir:

Further to the December 3, 2004 Notice of Appeal, the Appellant hereby submits  
this Appeal Brief.

02/08/2005 HDEMESS1 00000024 090435 10053969

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## **TABLE OF CONTENTS**

<b>ITEM</b>	<b>PAGE</b>
(1) REAL PARTY IN INTEREST	3
(2) RELATED APPEALS AND INTERFERENCES	3
(3) STATUS OF CLAIMS	3
(4) STATUS OF AMENDMENTS	3
(5) SUMMARY OF CLAIMED SUBJECT MATTER	3
(6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL	4
(7) ARGUMENT	4
(8) CONCLUSION	7
(9) CLAIMS APPENDIX	8

**(1) REAL PARTY IN INTEREST**

In this Appeal, the real party in interest is the assignee of record, InterDigital Technology Corporation.

**(2) RELATED APPEALS AND INTERFERENCES**

Appellant and the undersigned representative do not know of any other appeal, interference, or judicial proceeding that is related to, directly affects, is directly affected by, or has a bearing on decision of the Board of Patent Appeals and Interferences (hereinafter the "Board" or the "Board of Appeals") in this Appeal.

**(3) STATUS OF THE CLAIMS**

Claims 14 and 15 are rejected. Claims 14 and 15 are the subject of this Appeal and are attached in the Claims Appendix. No other claims are pending.

**(4) STATUS OF THE AMENDMENTS**

Appellant filed a November 3, 2004 Reply subsequent to the final rejection mailed September 3, 2004. A November 22, 2004 Advisory Action did not indicate that that Reply would or would not be entered; however, no amendments to the specification or claims were included in that Reply.

**(5) SUMMARY OF CLAIMED SUBJECT MATTER**

**Independent Claim 14**

Claim 14 is a method for use in code division multiple access (CDMA) radio network controller (RNC), having a medium access controller – controlling/shared (MAC-c/sh) entity. P. 2, ¶[0009], lns. 1-5, Figures 1 and 3 (elements 36, 60 and 58). A flow control entity is provided for the MAC-c/sh entity. P. 6, ¶¶ [0028]-[0029], ln. 6 of [0028] to ln.5 of [0029], Figures 3, 6 and 7 (entire Figures). A flow of data is controlled through a forward access common channel (FACH) by a plurality of sources by the flow

control entity. P. 6, ¶¶ [0028]-[0029], ln. 6 of [0028] to ln.5 of [0029], Figures 3, 6 and 7 (entire Figures). Each source is permitted a specified amount of data to buffer for transfer over the FACH. P. 6, ¶[0029], lns. 2-5, Figures 3, 6 and 7 (entire Figures). The flow of the data for each source is controlled by the flow control entity in response to the specified amount and an associated priority of the data for that source. P. 6, ¶[0029], lns. 1-9, P. 5, all of ¶¶[0026]-[0027], Figures 3, 6 and 7 (entire Figures).

### **Independent Claim 15**

Claim 15 is a code division multiple access (CDMA) radio network controller (RNC). P. 2, ¶[0009], lns. 1-5, Figures 1 (element 36). The RNC comprises a medium access controller – controlling/shared (MAC-c/sh) entity, having a flow control entity. P. 2, ¶[0009], lns. 1-5, P. 6, ¶¶ [0028]-[0029], ln. 6 of [0028] to ln.5 of [0029], Figures 1 (element 36) and Figures 3, 6 and 7 (entire Figures). . The flow control entity controls a flow of data by a plurality of sources through a forward access common channel (FACH). P. 6, ¶¶ [0028]-[0029], ln. 6 of [0028] to ln.5 of [0029], Figures 3, 6 and 7 (entire Figures). Each source has a specified amount of data that it is permitted to buffer for transfer over the FACH. P. 6, ¶[0029], lns. 2-5, Figures 3, 6 and 7 (entire Figures). The flow control entity controls the flow of the data for each source in response to the specified amount and an associated priority of the data for that source. P. 6, ¶[0029], lns. 1-9, P. 5, all of ¶¶[0026]-[0027], Figures 3, 6 and 7 (entire Figures).

### **(6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 14 and 15 stand rejected under 35 U.S.C. 102(e) as being unpatentable over U.S. Patent No. 6,421,335 (Kilkki et al., hereafter referred to as “Kilkki”).

### **(7) ARGUMENT**

**Claims 14 and 15 Meet the Requirements of 35 U.S.C. 102(e), as being patentable over Kilkki**

Both claims (claims 14 and 15) recite "controlling a flow of data through a forward access common channel (FACH)..." Kilkki does not disclose the control of data flow through a forward access common channel (FACH). As is well known in the art, forward channels send data to users through forward links and, by contrast, reverse channels send data from the users to the network. Kilkki clearly discloses a system for controlling data transfer from users to the network (reverse link). See Kilkki, col. 3, lns. 36-38, "... for data packet transmission from a mobile communication unit (MCU) to a trunking network in a centralized implementation." Accordingly, Kilkki does not disclose data transmission through a forward channel at all and in particular a FACH, which is a channel well known in the art.

In wireless communications, the forward direction is defined such as "Forward link communications [are] directed from a fixed earth station via a satellite to a mobile terminal." Newton's Telecom Dictionary, 19<sup>th</sup> Update, CMP Books, page 335. Although, in general, a forward channel is the path carrying data from the person making the call, this is not the use of the term in radio systems. The radio channels going to the user from the network are considered the forward channels in such systems. Notwithstanding, the FACH is a channel well known in the art as carrying data from the network to multiple wireless users, so even if the term forward channel is construed as any channel carrying data from a user, the FACH is not defined in that manner. See paragraph [0008] of the present application for a description of the FACH.

Applicant also contend that a trunk carrying ATM cells of Kilkki is not a channel. The trunk can carry data of channels, but is not itself a channel. As a result, any of the cell processing for the trunk of Kilkki is not applied to a channel, but to the trunk.

The claims also recite (or has analogous recitation), "controlling a flow of data through a forward access common channel (FACH) by a plurality of sources by the flow control entity;... controlling the flow of the data for each source by the flow control entity in response to the specified amount and an associated priority of the data for

that source.” Kilkki does not does any control of data from “a plurality of sources” at all. As described in the present specification, a variety of sources such as the CCCH, DCCH, DTCH, etc. are mapped onto the FACH. In the advisory actions, the plurality of sources was interpreted “as relating to the resources used to accomplish the flow control not the number of sources generating data.” However, the claims recite “in response to the specified amount and an associated priority of the data for that source.” Resources used for flow control do not have “associated priority of the data” and do not have “the specified amount … of the data”. Accordingly, this interpretation of the term source is inconsistent with the entire use of the term throughout the claim and Kilkki, clearly, does not disclose “a plurality of sources:” as in the context of the claims.

The claims also recite (or has an analogous recitation), “permitting each source a specified amount of data to buffer for transfer over the FACH… controlling the flow of the data for each source by the flow control entity in response to the specified amount …”. Kilkki only discloses discarding packets when the node<sub>A</sub> buffer becomes filled. *See* Kilkki, col. 9, lns. 15-19. The node<sub>A</sub> buffer is clearly not a specified amount for a plurality of sources. The node<sub>A</sub> buffer has some inherent capacity, but that would only apply for a single source (namely the node<sub>A</sub> buffer) and not a plurality of sources. Also, the discarding of packets is not in response to the capacity of the buffer, but is related to the occupancy level of that buffer.

Both claims also recite a Code Divisional Multiple Access (CDMA) Radio Network Controller (RNC), a medium access controller-controlling shared (MAC-c/sh) entity and a flow control mechanism..

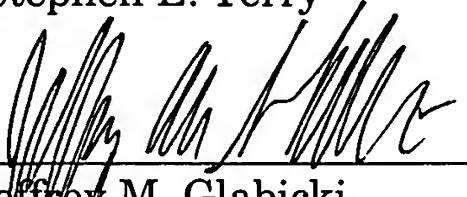
**Applicant:** Stephen E. Terry  
**Application No.:** 10/053,969

**(8) CONCLUSION**

For the reasons stated above, pending claims 14 and 15 meet the requirements 35 U.S.C. §102(e). Accordingly, the final rejection of the claims under 35 U.S.C. §102(e) should be reversed.

Respectfully submitted,

Stephen E. Terry

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**(9) CLAIMS APPENDIX**

(PENDING CLAIMS OF U.S. PATENT APPLICATION NO. 10/053,969)

14. A method for use in code division multiple access (CDMA) radio network controller (RNC) having a medium access controller – controlling/shared (MAC-c/sh) entity comprising:

providing a flow control entity for the MAC-c/sh entity;

controlling a flow of data through a forward access common channel (FACH) by a plurality of sources by the flow control entity;

permitting each source a specified amount of data to buffer for transfer over the FACH; and

controlling the flow of the data for each source by the flow control entity in response to the specified amount and an associated priority of the data for that source.

15. A code division multiple access (CDMA) radio network controller (RNC) comprising:

a medium access controller – controlling/shared (MAC-c/sh) entity having a flow control entity, the flow control entity controls a flow of data by a plurality of sources through a forward access common channel (FACH), each source has a specified amount of data that it is permitted to buffer for transfer over the FACH, the flow control entity controls the flow of the data for each source in response to the specified amount and an associated priority of the data for that source.